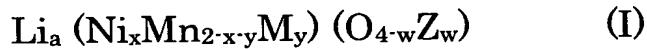


CLAIMS

1. A secondary battery comprising a cathode active material having an average discharge potential of 4.5 V or more with respect to Li metal and an electrolyte, wherein the electrolyte includes a high-permittivity solvent having a dielectric constant of 40 or more and another solvent which is at least one of dimethyl carbonate and ethylmethyl carbonate.
5
2. The secondary battery as defined in claim 1 further comprising an anode active material containing amorphous carbon.
3. The secondary battery as defined in claim 1, wherein a volume ratio of the high-permittivity solvent with respect to the electrolyte is in a range from 10 to 70 %.
4. The secondary battery as defined in claim 1, wherein the high-permittivity solvent is ethylene carbonate or propylene carbonate.
5. The secondary battery as defined in claim 1, wherein the cathode active material is spinel-type lithium-manganese composite oxide.

6. The secondary battery as defined in claim 5, wherein the spinel-type lithium-manganese composite oxide is represented by the following general formula (I)



wherein $0.4 < x < 0.6$, $0 \leq y$, $0 \leq z$, $x+y < 2$, $0 \leq w \leq 1$ and $0 \leq a \leq 1.2$ are satisfied; M is at least one metal selected from the group consisting of Li, Al, Mg, Ti, Si and Ge, and Z is at least one of F and Cl.

7. The secondary battery as defined in claim 6, wherein the "y" in the general formula (I) satisfies a relation of $0 < y$.

8. The secondary battery as defined in claim 6, wherein the "w" in the general formula (I) satisfies a relation of $0 < w \leq 1$.